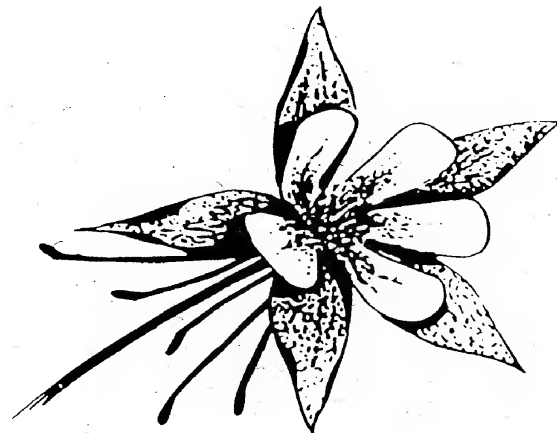


Aquilegia



Newsletter of the Colorado Native Plant Society

"... dedicated to the appreciation and conservation of the Colorado native flora"

Volume 25 Number 6

WORKSHOP EDITION

September - October 2001

2001 - 2002 COLORADO NATIVE PLANT SOCIETY WORKSHOP PROGRAM CoNPS Workshop Committee, Bill Jennings Chair

The Colorado Native Plant Society is proud to present the schedule for workshops to be held on the East Slope, from November, 2001, through March, 2002. Gay Austin is organizing a suite of workshops to be held on the West Slope. Be sure to check elsewhere in *Aquilegia* for West Slope workshops and activities.

For 18 seasons, workshops have brought native plant lovers together with a well-informed instructor, who may have herbarium specimens, live plants, photographs, identification keys, and other materials available for hands-on study. The opportunity to receive one-on-one instruction and hear informative lectures has made the workshop series one of the most popular Native Plant Society programs. Attendees need no special skills or background — a love of plants and a desire to learn are the only prerequisites. There are no exams, grades, or homework; and working together is encouraged. The goal is to demystify plant identification and to enhance in all of us our enjoyment and understanding of Colorado's native flora. All East Slope workshops described below are one-day only, usually from 9:00 AM to 3:00 PM. If multiple sessions have been scheduled, the same material will be presented each session for different groups of attendees.

**Registration begins
21 September 2001!**

To register for East Slope workshops, please call (303) 665-6903 and leave a message on the answering machine. You may also register by writing to: Bill Jennings, P.O. Box 952, Louisville, CO 80027. However you register, be sure to provide your name, address, telephone number (including area code!), and those workshops you wish to attend. If multiple sessions are scheduled, be sure to indicate preference — Saturday sessions usually fill first. Receipt of your registration request will be acknowledged within a few days.

About 10 days prior to the workshop, registrants will receive notice by mail regarding location, time, lunch, references, and supplies, with a list of other registrants to encourage carpooling. The fee for each workshop is \$12 for CoNPS members and \$27 for non-members (\$12 to cover the costs of the workshop and \$15 to join the Society). Members of the native plant societies of neighboring states are considered members of CoNPS for purposes of workshop registration. Payment is made on the day of the workshop.



Penstemon gibbensii
Artist: Janet Wingate

Workshops have been very popular in the past, with multiple sessions frequently scheduled to meet demand, or with long waiting lists for the seats available. However, no-shows have been a problem. There are only so many seats available in the classrooms and labs in which these workshops are held, and we are holding a seat for you. If you find that you cannot attend a workshop for which you are registered, PLEASE call and cancel your registration as soon as possible!

It takes considerable time and effort for instructors to plan and develop workshops and field trips. Please let us know how you like the activities offered by CoNPS — we appreciate feedback.

"Workshops" continues on page 2

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"Workshops" continued from page 1**MILKWEEDS OF COLORADO****Leader: Carolyn Crawford****Location: Foothills Nature Center, Boulder****First session: Saturday, November 10, 2001****Second session: Sunday, November 11, 2001**

Carolyn Crawford, best known as a botanical artist, has been studying the Colorado milkweeds (Asclepiadaceae) for many years. This workshop, last taught in 1992, will cover all of the Colorado milkweeds, including *Asclepias rusbyi*, recently identified for Colorado's western slope. In addition to photographs, keys, and specimens, Carolyn will discuss the pollination of milkweeds and other plant-insect interactions, including those of the monarch and queen butterflies, obligate feeders on milkweeds. The queen, a butterfly of the southwestern deserts, occasionally reaches Colorado. Carolyn and her family found a queen larva on milkweeds in their backyard in Louisville, and watched it pupate and emerge in July, 2001.

PROBLEM WEEDS OF THE FRONT RANGE URBAN CORRIDOR**Leaders: Eric Lane and Alicia Doran****Location: Jefferson County Open Space, Golden****First session: Saturday, December 8, 2001****Second session: Sunday, December 9, 2001**

Eric Lane (Weed Coordinator, Colorado Department of Agriculture) and Alicia Doran (Weed and Pest Management Specialist, Jefferson County) will present information on problem weeds in this part of the state. In addition to providing handouts, specimens, and photos, other topics will be addressed. Eric will discuss the state weed law and what you can do to help, from both identification and control perspectives. Alicia will discuss weed control measures (integrated pest management) used in Jefferson County. Weed control is a very important topic for Colorado native plants, without which much land has been and continues to be lost, as weeds displace the desirable native vegetation, and consequently food and habitat for our native fauna. This workshop will be held in the Jefferson County Open Space Ponderosa Room at 700 Jefferson County Parkway in Golden, Colorado.



Linaria genistifolia
ssp. *dalmatica*

GRASSES: THE TRIBE FESTUCAE**Leader: Dr. David L. Buckner****Location: Foothills Nature Center, Boulder****First session: Saturday, January 12, 2002****Second session: Sunday, January 13, 2002**

Dave Buckner continues his excursions into the tribes of the grass family, this time with the Festucae. This is a group with a large number of genera and species in Colorado, including *Festuca*, *Poa*, and *Bromus*. In recent years, there has been some taxonom-

ic reshuffling, and new generic boundaries have greatly complicated the nomenclature, especially for those who learned the names years ago. This is a widely distributed group, including a number of weedy species and species used for revegetation of disturbed areas. A review of the structure and names of the parts of the grass plant will be presented first, with the characteristics of different tribes discussed before focusing on the Festucae.

ECOLOGY AND IDENTIFICATION OF WILLOWS**Leader: Gwen Kittel****Location: Foothills Nature Center, Boulder****First session: Saturday, February 9, 2002****Second session: Sunday, February 10, 2002**

Gwen Kittel, ecologist with The Nature Conservancy, will present a workshop on the willows, with a focus on their ecology. Willow identification can be greatly aided if one knows the ecology of the willows: what occurs where and with what. Gwen has worked with the willows for many years and will present her observations in this unique workshop. A key to the willows based on vegetative characters has been developed and will be distributed at the workshop. This is not a repeat of Bob Dorn's willows workshop from January, 2000, but a different perspective on a difficult subject.

SENECIO, WITH A FOCUS ON THE PLAINS**Leader: Dr. Craig Freeman****Location: Lookout Mountain Nature Center, Golden****First Session: Saturday, February 23, 2002****Second Session: Sunday, February 24, 2002**

Dr. Craig Freeman, with the University of Kansas, will be our out-of-state workshop leader this year. A specialist in the botany of the Great Plains, he will cover genus *Senecio* in the broad sense, including related genera such as *Packera*. The primary focus will be on those species that occur on the Plains of eastern Colorado. Although headquartered in Lawrence, Kansas, his continuing research into the flora of the Great Plains has led him into eastern Colorado numerous times. The Colorado Natural Areas Program funded his specimen collection program for several counties in eastern Colorado during 2000.

VEGETATIVE CHARACTERS FOR PLANT IDENTIFICATION**Leader: Dr. Miriam Denham****Location: Foothills Nature Center, Boulder****First session: Saturday, March 16, 2002****Second session: Sunday March 17, 2002**

Plants are not just their flowers! Learning about the vegetative characteristics of plants can help you to identify plants with or without flowers. While most of us are familiar with leaf shapes, did you know that plant hairs, called trichomes, can vary greatly from species to species? Have you ever wondered why plants have hairs at all? Have you ever considered that root arrangement and rhizome structure is quite varied according to the nature of the plant? Explore these and other questions (or bring your own) to this workshop, which may change the way you look at plants. Chapters VI through X of Harrington's *How to Identify Plants* will provide a basis.

Registration begins 21 September 2001!

PHOTOS OF COLORADO PLANT SPECIES NEEDED

Would you like to contribute to an important new technology in systematics that is destined to become one of the most important in the last 50 years, while helping to promote the study and appreciation of Colorado's native plants? Dr. Neil Snow, plant taxonomist at the University of Northern Colorado, is laying the groundwork for the production of an on-line, interactive identification key to the vascular flora of Colorado. The project is entitled the Colorado Interactive Flora (CIF). When finished, the CIF will enable users to identify any species from Colorado on-line by selecting appropriate vegetative and fertile characters visible on the unknown.

A goal of the CIF is to have at least one high-quality photographic image of each species. Text boxes accompanying each taxon will give additional information, such as habitats and counties of occurrence, elevation, ethnobotanical uses, common name(s), and synonymy. The CIF will have enormous educational value and be of great use to those who manage the State's public and private lands, not to mention wildflower enthusiasts and students. When finished, the CIF will be available on the UNC Herbarium website.

We are seeking high quality photos (35 mm or color print) of all native and introduced species. Relatively close-up images of flowers are preferable, although fruiting material will be considered (particularly in taxa such as Cyperaceae, Brassicaceae, *Astragalus*, *Salix*, and others where fruits are essential for identification). Habitat photos will not generally be considered. The more uncommon the species, the higher the likelihood the photo will be included. Photos of vouchered specimens placed in a Colorado herbarium will be given the highest priority. All photographers will be acknowledged for each photo contributed! Pursuant to University policy, authors of photographs will need to sign an agreement giving permission for use in the CIF. UNC will not use the photos for any other purpose and will eventually return them to the submitter.

If you are interested in contributing photos, please contact Dr. Snow for additional details at nsnow@unco.edu. Working together, Colorado plant enthusiasts can actively contribute to this important new technology and help make the state a leader in the production of on-line, interactive identification keys to its flora.

WORKGROUP FORMING TO STUDY VEGETATIVE CHARACTERS

Miriam Denham, CoNPS

Vegetative characters of plants can be used to identify plants. The purpose of this group is to catalogue and to depict (in photographs or line-drawings) the vegetative characters, particularly plant hairs, of Colorado plants. Much of the work to date has been in Boulder and Jefferson Counties, but persons in other areas could contribute immeasurably.

It is anticipated that this work will make it easier to identify plants without making numerous trips to the field for plant inventories. Additionally, it is expected that this information will be used to help combat "plant blindness." Please contact Miriam L. Denham, Ph.D. at 10353 N. 65th St., Longmont, CO 80503-9018 or via e-mail at denham@spot.colorado.edu.

MOONWORTS IN THE INDIAN PEAKS

David Steinmann, CoNPS

In the past three summers I have looked for moonworts (*Botrychium* subgenus *Botrychium*) in the Indian Peaks area of Boulder County, Colorado. Moonworts are tiny ferns that are from one half to a few inches tall. Their single leaf consists of two parts — a leafy trophophore and a sporophore that looks like small grape clusters. They are perennial and grow in association with a mycorrhizal fungus. Like mushrooms they may not come up in dry years.

I began looking for moonworts in the Indian Peaks after working with Peter Root at Pikes Peak and taking his fern workshop sponsored by CoNPS. Most moonworts are considered rare in Colorado. Some species are really very rare, but others are just hard to see. They grow in meadows and shrublands from just below 10,000 feet up to tree line. Locations where I have found them in the Indian Peaks include Brainard Lake, Mt. Audubon, Pawnee Pass trail, Devil's Thumb trail, Rainbow Lakes, Meadow Mountain, Coney Flats, Fourth of July trailhead, and Caribou. I have found at least seven species including *B. echo*, *B. hesperium*, *B. lanceolatum*, *B. lunaria*, *B. minganense*, *B. pallidum*, *B. simplex*, and possibly *B. pinnatum*.

Moonworts are most likely to be found in old disturbed areas such as mines or town sites, or along trails and roads. Associated plants include subalpine goldenrod, wild strawberry, yarrow, clover, and willowherb. The presence of small spruce and fir trees often indicates that the area is old enough for a moonwort population to develop. Moonworts are easier to see late in the summer, when their sporophores ripen.

Why look for moonworts? They are an important part of our fern flora and the presence of rare species could impact land use decisions. They are also mysterious little plants and looking for them is both fun and interesting.

NEW EDITIONS OF COLORADO FLORA NOW AVAILABLE

Rick Brune and Velma Richards, Sales

The new editions of W.A. Weber's *Colorado Flora: East Slope* and *Colorado Flora: West Slope* are now available to members at a discounted price. They are \$22.00 each, plus tax; postage is an additional \$2.50 per book (see below). If you order 10 or more books (any combination), postage is only \$1.00 per book — order with your friends and save. The floras will also be available at workshops, Denver and Boulder Chapter meetings, and the Annual Meeting in September in Fort Collins. Pat Murphy currently has a supply for the Boulder area members. They can also be ordered from: Velma Richards at 3125 W. Monmouth Ave., Englewood, CO 80110 or (303) 794-5432.

Please include sales tax at the following rates. NOTE: There is no tax on out-of-state sales:

Boulder @ 7.36% All other Boulder County @ 4.1%
City and County of Denver @ 7.20%
Ft. Collins @ 6.70% All other Larimer County @ 3.70%
Adams, Arapahoe, and Jefferson County @ 3.70%
All other Colorado @ 2.90%

WHAT TO DO ABOUT SALT CEDAR Symposium Coming to Grand Junction Kacey Conway, Tamarisk Research Committee

Tamarisk, or salt cedar, is a highly invasive woody plant introduced from central Asia and the eastern Mediterranean, which has taken over more than 1.5 million acres of valuable riparian habitat throughout the West. Not only is it out-competing native vegetation and threatening wildlife, but also creating salty soils and drying out riparian ecosystems wherever it is established.

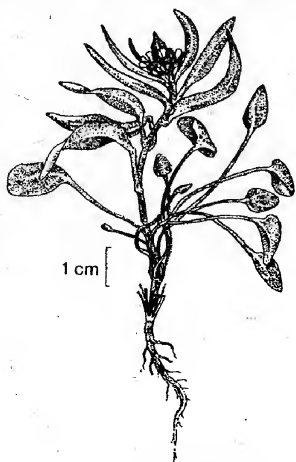
The Tamarisk Symposium will take place on Wednesday and Thursday, September 26 and 27, 2001, at the Holiday Inn in Grand Junction, Colorado to explore the problem of tamarisk and some possible solutions. Topics will include the nature of the tamarisk invasion, tamarisk's impact on water and wildlife, tamarisk control and management, the promising area of bio-controls, re-vegetation scenarios, and funding for tamarisk control projects. Field trips to two project sites in the Grand Junction vicinity will round out the conference. The cost for the two day event is \$50.00, plus \$10.00 each day for lunch. Discounted rooms are available at the Holiday Inn.

Sponsored by the Colorado State University Cooperative Extension, Tamarisk Coalition, U. S. Fish and Wildlife Service Eco-Team, and the Colorado Weed Management Association, the Tamarisk Symposium is also partially funded by a grant from the National Fish and Wildlife Foundation Pulling Together Initiative. Please contact Susan Rose at (970) 244-1834 or srose@co.mesa.co.us, or visit our website at <http://www.coopext.colostate.edu/TRA/tamarisksymposium.html> to obtain a symposium agenda and registration form.

ILLUSTRATED KEYS NOW AVAILABLE

Bruce S. Barnes, Flora ID Northwest

Interactive keys for computer produced by Flora ID Northwest are now available, with color images for virtually all species. Many folks from around the northwest deserve thanks for allowing their slides to be copied, thereby making this possible. Coincidentally, the Windows software in which the keys run has been completely rewritten, resulting in much easier use. Prices have also been lowered, so that keys for an entire state are \$100, or \$300 for the entire northwest. Keys are available (province or statewide only) for Southern British Columbia, Washington, Oregon, Idaho, Montana, Wyoming, Utah, and Colorado. The distributor is The New York Botanical Garden Press (nybgpress@nybg.org), located at 200th Street and Kazimiroff Blvd, Bronx, NY 10458-5126 or call (718) 817-8842. For more information, you may also contact Bruce S. Barnes by: mail at Flora ID Northwest, 731 NW 5th, Pendleton, OR 97801; phone at (541) 276-5547; FAX (541) 276-8405; or e-mail at flora@ucinet.com.



Eutrema penlandii
Artist: Carolyn Crawford

GRADUATE STUDY IN FLORISTICS

Position Available

Dr. Ronald L. Hartman, Rocky Mountain Herbarium

The Rocky Mountain Herbarium, University of Wyoming, seeks students interested in pursuing an M.S. degree in broad-scale floristics. The successful applicants are expected to be energetic, highly motivated individuals capable of working with limited supervision for extended periods of time. A member of the staff will spend two to four weeks each summer assisting with collecting. Beginning Spring 2002, the Santa Fe National Forest, including Valles Caldera National Preserve (2,600 mi² over parts of Los Alamos, Mora, Rio Arriba, Sandoval, San Miguel, and Santa Fe Counties in north-central New Mexico) will fund two summers of fieldwork, provide housing, and provide space for the processing of specimens. Likewise, the Medicine Bow National Forest will fund work on the Thunder Basin National Grassland and vicinity (1,500 mi² over parts of Campbell, Crook, Niobrara, and Weston Counties in northeastern Wyoming). Recipients must compete successfully for a teaching assistantship in the Department of Botany.

Other inventories planned include the western Rio Grande and adjacent San Juan National Forest; BLM lands – Montrose District; southeastern Colorado (Comanche National Grasslands and vicinity); Buffalo Gap National Grassland in South Dakota; and the eastern slope of the Wind River Range in Wyoming. Current projects include the southern Gunnison National Forest, Upper Arkansas Drainage to Gore Range (San Isabel/White River National Forests), Routt National Forest, Canyon Lakes Ranger District, and Roosevelt National Forest in Colorado; Payette National Forest in Idaho; Umatilla National Forest in Oregon; and the Laramie Basin/Eastern Plains and Bighorn Basin in Wyoming.

The Rocky Mountain Herbarium has completed 36 intensive inventories in Colorado, Idaho, New Mexico, South Dakota, Utah, Washington, and Wyoming over the past two decades, with the goal of producing a critical flora of the Rocky Mountain region. The areas studied range from 1,300 mi² (extremely mountainous) to 7,000 mi² (plains and basins); numbered vouchers average from 9,000 to 12,000, with a record of 20,585 from south-central Colorado. Emphasis has been on documenting species of conservation concern, invasives, and vascular plants, in general. Associated data are stored in a Microsoft Access database (370,000+ records) for use with GIS in predictive modeling, ground truthing of remotely sensed areas, managing species of conservation concern, documenting invasives and noxious weeds, etc.

For more information, see "The Rocky Mountain Herbarium, Associated Floristic Inventory, and the Flora of the Rocky Mountain Project" in Volume 28 of the *Journal of the Idaho Academy of Sciences* (Hartman, 1992); a 1996 update, the *RM Newsletter – Millennium Edition*; and other information on the program, checklists of Colorado and Wyoming vascular plants, and the Atlas of the Vascular Plants of Wyoming at <http://www.rmh.uwyo.edu>. See also the Department of Botany website at <http://www.uwadmweb.uwyo.edu/botany/>. For details, contact Dr. Hartman at Rocky Mountain Herbarium Department of Botany, University of Wyoming, Laramie, Wyoming 82071-3165; rhartman@uwyo.edu; (307) 766-2236; FAX (307) 766-2851. Deadline for Graduate Applications is 15 February 2002.

CHAPTER NEWS

Boulder Chapter

Monthly meetings are held October through April. **NEW FOR THIS FALL**, the Chapter will meet at 7:00 PM on the second Thursday of each month at the Open Space and Mountain Parks offices at 66 S. Cherryvale Rd. From the intersection of South Boulder Road and Cherryvale, travel south on Cherryvale about 100 yards, and follow the lane West back to the offices. Meetings will be held in the north building conference room. For more information, please contact Chapter President Kathy Damas at (303) 543-1492.

October 11, 2001 7:00 PM A Photographic Journey of Big Bend through Time and Space

Join local botanists/photographers **Bill Jennings** and **Carolyn Crawford** on a photographic tour of Big Bend National Park, Texas. Over the last 20 years Bill and Carolyn have visited the park around the seasons, from the Rio Grande to the top of the Chisos Mountains at 7500 feet. This promises to be a floristic feast for the eyes!

November 15, 2001 7:00 PM Endangered Fish and Threatened Orchids: A Dinosaur NM Dilemma

Dinosaur National Monument Botanist **Tamara Naumann** has been monitoring efforts to improve rare species habitat, some of which conflict with one another. Manipulation of water levels of the Green River as it flows through the canyons of the Monument to improve habitat for four endangered fish species may be compromising habitat of the threatened Ute ladies'-tresses orchid (*Spiranthes diluvialis*). Tamara will discuss the balancing of multiple issues required in this complex and interesting management puzzle.

December 13, 2001 7:00 PM Nebraska Sandhills, Sea of Grass

The Sandhills cover one-fourth of the state of Nebraska and is the largest remaining expanse of mixed-grass and tallgrass prairie in North America. **Stephen Jones**, Boulder teacher, naturalist, environmental consultant, and writer, will talk about why this largely privately owned area is becoming more natural as time goes by. Mixing

in images and sounds that Steve has recorded over the years, he will focus on unique plant communities, wildlife, and land use issues.

Fort Collins Chapter

Meetings are held at 7:00 PM in the Main Conference Room of the National Seed Storage Laboratory (NSSL) at CSU. The NSSL is located just west of the railroad tracks, about one block north of Pitkin Street (enter on west side of building). Members are invited to join the speaker for dinner at Coopersmiths in Old Town, Fort Collins at 5:30 PM prior to the meeting. For more information, contact interim Chapter President Annette Miller at (970) 495-3240.

November 6, 2001 7:00 PM A Tour of Rare Plants of El Paso County Dave Anderson (Botanist, Colorado Natural Heritage Program) will be discussing the rare plants of El Paso County.

December 4, 2001 7:00 PM Purple Loosestrife in Colorado David Weber (Noxious Weed Coordinator, Colorado Division of Wildlife) will deliver a presentation discussing purple loosestrife in Colorado, with some specific information about the weed in Larimer County.

February 5, 2002 7:00 PM A Photographic Journey of Big Bend through Time and Space Join local botanists/photographers **Bill Jennings** and **Carolyn Crawford** on a photographic tour of Big Bend National Park, Texas. Over the last 20 years Bill and Carolyn have visited the park around the seasons, from the Rio Grande to the top of the Chisos Mountains at 7500 feet. This promises to be a floristic feast for the eyes!

Metro-Denver Chapter

Monthly meetings are held at 7:00 PM from September through April in the Morrison Center at the Denver Botanic Garden. For more information, contact Chapter President Denise Larson at (303) 733-4338 or Leo P. Bruederle at lbruederle@earthlink.net.

September 25, 2001 7:00 PM The World of Wildland Fires, Prescribed Burns, and Fire Ecology

The 2000 wildfire season was one of the biggest on record. **Justin Dombrowski** (Wildland Fire Management Officer, City of Boulder Fire Department) will help us understand what firefighters go through, the risks they take, and why they do it. Firefighters have become fire managers, as they undertake forest and grassland management using prescribed burning, forest thinning, and other techniques to benefit native vegetation, reduce the severity of wildfires, and help reduce the impacts of mountain pine beetle and other disturbances. Management also involves working with planners, homeowners, and developers to help reduce threats to those who live in the wildland urban/interface.

October 30, 2001 7:00 PM What Ever Happened to the Three Little Pigs? The use of botany in forensic investigation

NecroSearch International is a non-profit specializing in the search of clandestine gravesites and evidence, involving many disciplines. For example, recognizing and identifying the activities of wild and domestic animals may help interpret a crime scene and recover evidence. **Vickey Trammell** (Biology, Arapahoe Community College) will speak about how she became a member of NecroSearch; her experiences assisting law enforcement in recovering clandestine graves and finding victims; and how a knowledge of plants can assist and present the stories of real cases, generally speaking.

December 4, 2001 7:00 PM Hybridization? Are You Loco?

Dr. Shanna Carney (Biology, Colorado State University) will recount the early stages of her research project on the Colorado locoweeds, *Oxytropis sericea* and *O. lambertii*. Shanna will focus on reproductive isolation, the conditions that favor hybridization, and how aspects of pollination ecology influence the likelihood and direction of hybridization. Expect some great photographs of locoweed, as well as a few pollinators!

January 29, 2002

7:00 PM

Flora of the Sonoran Desert

The Sonoran Desert is one of our most diverse ecosystems. Of the four major North American desert systems, the Sonoran rarely experiences freezing temperatures. As such, many plants of more southern latitudes make their northernmost appearance in this desert. **James Riser** (Biology, University of Colorado at Denver) will present a slideshow depicting several of the six subdivisions of the Sonoran Desert, and will discuss adaptations to aridity and periodic rainfall. Comparisons with other North American deserts will also be made. This talk should provide a colorful respite from winter, and may even tempt you to visit warmer climes in the spring.

February 26, 2002

7:00 PM

A Photographic Journey of Big Bend through Time and Space

Join local botanists/photographers **Bill Jennings** and **Carolyn Crawford** on a photographic tour of Big Bend National Park, Texas. Over the last 20 years Bill and Carolyn have visited the park around the seasons, from the Rio Grande to the top of the Chisos Mountains at 7500 feet. This promises to be a floristic feast for the eyes!

March 26, 2002

7:00 PM

Penland Alpine Fen Mustard: To be or not to be

Penland alpine fen mustard (*Eutrema penlandii*) is a globally rare species restricted to Colorado's Mosquito Range. Its closest relative is the circumboreal *E. edwardsii*. In 1987, W.A. Weber subsumed *E. penlandii* into its North American congener, publishing the name *E. edwardsii* ssp. *penlandii*. Since then, there has been considerable interest and debate among taxonomists and conservation biologists regarding the systematic relationship between the two taxa. Marr Fund recipient **Kim Fayette Regier** (Biology, University of Colorado at Denver) will present the results of her research — including some surprises — that reveal the two to be distinct.

April 30, 2002

7:00 PM

Floristic Survey of the Upper Arkansas Valley and Lower Gore Range

Intense floristic inventories have been the focal point of the Rocky Mountain Herbarium (RMH) at the University of Wyoming since the 1970's. Marr Fund

recipient **Emily Holt** (Botany, University of Wyoming) will discuss her Master's research, which comprised a floristic survey of the Sawatch Range (including the Collegiate Peaks and the highest Peak in Colorado, Mount Elbert), the eastern Mosquito Range, the southern Gore Range, and a portion of the Eagle Valley between Vail and Dotsero. The total area covers approximately 3,000 square miles and includes seventeen of Colorado's 54 peaks over 14,000 feet. Her research uncovered new and previously documented populations of over 30 of Colorado's rare plants!

METRO-DENVER CHAPTER HOLDS WEED PULL Denise Larson, CoNPS

On June 2, 2001, nine members of the Metro-Denver Chapter of CoNPS spent a beautiful morning weeding City property along Cherry Creek. This small section of the Creek, part of the City of Denver Natural Areas, contains a remnant of native sandy grasslands. Native species found included needle-and-threadgrass (*Stipa comata*), blue grama (*Bouteloua gracilis*), three-awn (*Aristida purpurea*), spiderwort (*Tradescantia occidentalis*), yucca (*Yucca glauca*), and prickly pear cactus (*Opuntia polyacantha*). A large number of noxious and obnoxious weeds also occur in the area, including cheatgrass (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), and jointed goatgrass (*Aegilops cylindrica*). By the end of the morning, several trash bags filled with these weeds were removed, thereby giving the native plants some breathing room. We also removed diffuse knapweed (*Centaurea diffusa*) from a nearby site.

Plateau Chapter

Chapter activities are scheduled throughout the year. For more information, contact Chapter President Jeanne Wenger at (970) 256-9227 and Bluecrow2u@aol.com or Program Chair Lori Brummer at (970) 641-3561 and lbrummer@gunnison.com.

November 10, 2001

10:00 AM

Fall Planning Meeting and Slide Show

Join us for our annual fall planning meeting and potluck. We will have our planning

meeting, then lunch, followed by photos and slides. We will meet at the Forest Service office in Delta, Colorado at 10:00 AM. Bring ideas for field trips, activities and workshops for the year, plus lunch dishes and photos to share. If you have any questions or ideas for field trips, but can't attend the meeting, contact Lori Brummer via e-mail at lbrummer@gunnison.com or by phone at (970) 641-3561.

Southeast Chapter

For more information about the newly formed Southeast Chapter, as well as news and activities, please contact Chapter President Dan Fosha at (719) 572-6972 or danfosha@aol.com.

September 25, 2001

7:00 PM

Techniques of Identification: How to use a key

The Southeast Chapter will meet at Beidleman Nature Center at 740 W. Caramillo St., in Colorado Springs for a presentation by George Cameron, Botany Instructor at Pikes Peak Community College. George will provide tips on how to identify plants using a key. We will focus on the new edition of *Colorado Flora: Eastern Slope*. For more information, please contact Chapter President Dan Fosha at (719) 572-6972 or by e-mail at danfosha@aol.com.

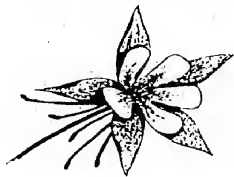
Southwest Chapter

For more information about the Southwest Chapter, as well as news and activities, please contact Chapter President Sandy Friedley at (970) 884-9245 or by e-mail at friedley@frontier.net.

DEADLINE APPROACHES Submit *Aquilegia* Contributions on or before October 15, 2001

Submit contributions for Vol. 25 No. 7 of *Aquilegia* on or before October 15, 2001. Articles not exceeding 1000 words are especially welcome. Previously published articles submitted for reprinting require permission. Include author's name, address, and affiliation; anonymity may be requested. Follow the format from previous issues closely. Spell check. Submit via e-mail or on disks — MAC, preferably — as an MS Word or rtf (rich text format) document.

Colorado Native Plant Society



The Colorado Native Plant Society is a non-profit organization dedicated to the appreciation and conservation of the Colorado native flora. Membership is open to all with an interest in our native plants, and is composed of plant enthusiasts both professional and non-professional.

Please join us in helping to encourage interest in enjoying and protecting Colorado's native plants. The Society sponsors field trips, workshops, and other activities through local chapters and statewide. Contact the Society, a chapter representative, or committee chair for more information.

Schedule of Membership Fees

Life	\$250
Supporting	\$50
Organization or Corporate	\$30
Family or Dual	\$20
Individual	\$15
Student or Senior	\$8

Membership Renewal/Information

Please direct all membership applications, renewals, and address changes to the Eric Lane (Chair of Membership), Colorado Native Plant Society, P.O. Box 200, Fort Collins, CO 80522. Please direct all other inquiries regarding the Society to the Secretary at the same address.

Aquilegia

Aquilegia is published four or more times per year by the Colorado Native Plant Society. This newsletter is available to members of the Society and to others with an interest in native plants. Articles for *Aquilegia* may be used by other native plant societies or non-profit groups, if fully cited to author and attributed to *Aquilegia*.

Articles not exceeding 2000 words in length and shorter items fewer than 500 words in length, such as unusual information about a plant, are especially welcome. Previously published articles submitted for reprinting require permission. Camera-ready line art or other illustrations are also solicited. Please include author's name and address, although anonymity may be requested. Articles submitted via e-mail or on disks (MAC preferably, or IBM) are appreciated. Please indicate word processing software and version; if possible, submit as an RTF (rich text format) file.

Please direct all contributions to the newsletter to:

Leo P. Bruederle
Biology, Campus Box 171
University of Colorado at Denver
P.O. Box 173364
Denver, CO 80217-3364
E-Mail: lbruederle@earthlink.net

Officers

President	Jill Handwerk .. 970-491-5857
Vice-President ..	David Anderson .. 970-484-0774
Secretary	Alice Guthrie .. 303-651-3127
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Outreach	and Alice Guthrie ..	303-651-3127
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Field Trips	Gwen Kittel ..	303-258-0908
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.....	and Velma Richards ..	303-794-5432
Rare Plant	Eleanor ..	
Monograph ..	Von Barga ..	303-756-1400
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Workshop: East ..	Bill Jennings ..	303-666-8348
West	Gay Austin ..	970-641-6264

MEMBERSHIP APPLICATION AND RENEWAL FORM

Name(s) _____

Address _____

(Address) _____

City _____ State _____ Zip _____

Phone () _____ E-mail _____

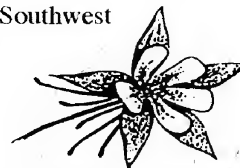
Chapter: ☐ Boulder ☐ Fort Collins ☐ Metro Denver ☐ Plateau ☐ Southeast ☐ Southwest

MEMBERSHIP CLASS:

Dues cover one calendar year.

- ☐ Individual, \$15.00
- ☐ Family/dual, \$20.00
- ☐ Senior, \$8.00
- ☐ Student, \$8.00
- ☐ Corporate, \$30.00
- ☐ Supporting, \$50.00
- ☐ Lifetime, \$250.00

In addition to my membership, I have included \$_____ as a contribution to the John Marr Fund (endowment in support of small grants-in-aid of research), \$_____ as a contribution to the Myrna P. Steinkamp Memorial Fund (endowment in support of small grants-in-aid of research), or \$_____ as a general contribution to the Society.



CoNPS IS A NON-PROFIT ORGANIZATION — DUES AND CONTRIBUTIONS ARE TAX-DEDUCTIBLE

CALENDAR

CHAPTER EVENTS

Boulder Chapter

- October 11 A Photographic Journey of Big Bend
through Time and Space
- November 15 Endangered Fish and Threatened
Orchids: A Dinosaur NM Dilemma
- December 13 Nebraska Sandhills, Sea of Grass

Fort Collins Chapter

- November 6 A Tour of Rare Plants of El Paso County
- December 4 Purple Loosestrife in Colorado
- February 5 A Photographic Journey of Big Bend
through Time and Space

Metro Denver Chapter

- September 25 The World of Wildland Fires,
Prescribed Burns, and Fire Ecology
- October 30 What Ever Happened to the Three Little
Pigs? Botany in forensic investigation
- December 4 Hybridization? Are You Loco?
- January 29 Flora of the Sonoran Desert

Plateau Chapter

- November 10 Fall Planning Meeting and Slide Show

Southeast Chapter

- September 25 Techniques of Identification: How to use
a key

SOCIETY EVENTS

Board Meeting

- September 28 Fort Collins, CO (Call CoNPS for details.)

Annual Meeting

- Sept 28-30 Holiday Inn University Park
Fort Collins, CO

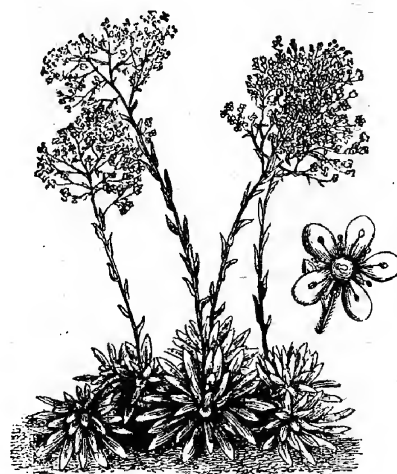
WORKSHOPS

- November 10, 11 Milkweeds of Colorado
First session: Saturday
Second session: Sunday
- December 8, 9 Problem Weeds of the Front Range
Urban Corridor
First session: Saturday
Second session: Sunday



Colorado Native Plant Society
P.O. Box 200
Fort Collins, Colorado 80522
<http://www.conps.org>

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